Docket No. F-7139 Ser. No. 09/942,857

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Previously presented) A method of fabricating a multi-fiber polarization-maintaining fiber assembly, comprising:

(1) a cover removal step for removing covers a few centimeters at one end from a plurality of polarization-maintaining fiber cables with a difference of a few millimeters therebetween to form exposed fiber portions of different lengths from one another;

(2) an assembly step for inserting the polarization-maintaining fiber cables into an insertion hole of a holder tube, holding said polarization-maintaining fiber cables integrally with said exposed fiber portions thereof arranged abreast at a proximal end such that a leading end of a one of the polarization-maintaining fiber cables having a one of the exposed fiber portions which is greater in length than an other of said polarization-maintaining fiber cables extends forward of a corresponding leading end of said other of said polarization-maintaining fiber cables, and sealing the insertion holes of the holder tube with a thermoset resin which is relatively high in viscosity;

(3) an adhesive filling step for filling an inner space of a multi-fiber ferrule with a thermoset resin which is relatively low in viscosity;

(4) a fiber cable insertion step for inserting the polarization-maintaining fiber cables assembled integral with the holder tube into the inner space of the multi-fiber ferrule, and inserting exposed fiber portions thereof into corresponding fiber holes of the multi-fiber ferrule;

(5) an orientation adjustment step for, while clamping the multi-fiber ferrule with a clamping jig so as not to be turned, rotating each of the polarization-maintaining fiber cables to determine orientation thereof; and

(6) an adhesive curing step for heating the multi-fiber ferrule while remaining clamped by the clamping jig to cure the thermoset resins.

2-4. (Canceled)

5. (New) A method of fabricating a multi-fiber polarization-maintaining fiber assembly, comprising the steps of:

removing respective length portions of covers from at least two polarization-maintaining fiber cables, each of said respective length portions being removed from an end of each of the at least two polarization-maintaining fiber cables, said respective length portions differing in length from one another such that exposed fiber portions of the at least two polarization-maintaining fiber cables are formed with different lengths;

arranging and holding the polarization-maintaining fiber cables with said exposed fiber portions running codirectionally and laterally disposed adjacent one another positioned such that a leading end of a one of said at least two polarization-maintaining fiber cables having a longer of said different lengths than an other of said at least two polarization-maintaining fiber cables extends forward of a corresponding leading end of said other of said at least two polarization-maintaining fiber cables; and

inserting the polarization-maintaining fiber cables into an inner space of a multi-fiber ferrule and the exposed fiber portions thereof into corresponding fiber holes of the multi-fiber ferrule.

6. (New) A method according to claim 5, wherein said step of arranging and holding includes inserting the polarization-maintaining fiber cables into an insertion hole of a holder tube.

7. (New) A method according to claim 6, further comprising sealing the insertion holes of the holder tube with a first thermoset resin.

8. (New) A method according to claim 7, further comprising filling the inner space of the multi-fiber ferrule with a second thermoset resin.

9. (New) A method according to claim 8, wherein said second thermoset resin has a lower viscosity than a viscosity of said first thermoset resin.

10. (New) A method according to claim 5, further comprising:

rotating each of the polarization-maintaining fiber cables to determine a respective orientation thereof while non-rotationally clamping the multi-fiber ferrule; and

heating the multi-fiber ferrule while maintaining said clamping to cure the thermoset resins.

11. (New) A method according to claim 5, wherein said respective length portions of said covers are a few centimeters, and said respective length portions differ in length by a few millimeters.

12. (New) A method according to claim 5, further comprising polishing a leading end of the multi-fiber ferrule to remove any portions of the exposed fiber portions protruding therefrom.

13. (New) A method of fabricating a multi-fiber polarization-maintaining fiber assembly, comprising the steps of:

removing respective length portions of covers from at least two polarization-maintaining fiber cables such that exposed fiber portions of the at least two polarization-maintaining fiber cables are formed;

inserting the polarization-maintaining fiber cables into an insertion hole of a holder tube to hold the polarization-maintaining fiber cables with said exposed fiber portions laterally disposed adjacent one another;

sealing the insertion holes of the holder tube with a first thermoset resin;

filling an inner space of a multi-fiber ferrule with a second thermoset resin; and

inserting the polarization-maintaining fiber cables assembled integral with the holder tube into the inner space of the multi-fiber ferrule and the exposed fiber portions thereof into corresponding fiber holes of the multi-fiber ferrule.

14. (New) A method according to claim 13, further comprising:

rotating each of the polarization-maintaining fiber cables to determine a respective orientation thereof while non-rotationally clamping the multi-fiber ferrule; and

heating the multi-fiber ferrule while maintaining said clamping to cure the first and second thermoset resins.

15. (New) A method according to claim 13, wherein said second thermoset resin has a lower viscosity than a viscosity of said first thermoset resin.

16. (New) A method according to claim 13, wherein:

each of said respective length portions differ in length from one another such that the exposed fiber portions of the at least two polarization-maintaining fiber cables are formed with different lengths; and

said exposed fiber portions are held in said step of inserting such that said exposed fiber portions run codirectionally and are laterally disposed adjacent one another positioned such that a leading end of a one of said at least two polarization-maintaining fiber cables having a longer of said different lengths than an other of said at least two polarization-maintaining fiber cables extends forward of a corresponding leading end of said other of said at least two polarization-maintaining fiber cables.